UNITED STATE DEPARTMENT OF COMMERCE
Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.
08/623,852	03/26/96	HARD	R	623852

IM62/0721

EXAMINER
BOS, S

ART UNIT	PAPER NUMBER
1754	19

THOMAS E KELLEY
CABOT CORPORATION
157 CONCORD ROAD
BILLERICA MA 01821

DATE MAILED: 07/21/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trad marks

UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER OF
PATENTS AND TRADEMARKS
Washington, D.C. 20231

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Paper No. 19

Application Number: 08/623852
Filing Date: March 26, 1996
Appellant(s): Hard et al.

MAILED

6661 0 ⁊ ʹ1ΛΓ

GROUP 1100

Charles W. Calkins
For Appellant

EXAMINER'S ANSWER

This is in response to appellant's brief on appeal filed **May 20, 1999.**

(1)   Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2)   Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3)   *Status of Claims*

The statement of the status of the claims contained in the brief is correct.

(4)   *Status of Amendments After Final*

The appellant's statement of the status of amendments after final rejection contained in

the brief is incomplete.

The amendment after final rejection filed on May 20, 1999 has not been entered.

(5)   *Summary of Invention*

The summary of invention contained in the brief is correct.

(6)   *Issues*

The appellant's statement of the issues in the brief is correct.

(7)   *Grouping of Claims*

The rejection of claims 1-13 stand or fall together because appellant's brief does not

include a statement that this grouping of claims does not stand or fall together and reasons in

support thereof. See 37 CFR 1.192(c)(7).

The rejection of claims 14-17 stand or fall together because appellant's brief does not

include a statement that this grouping of claims does not stand or fall together and reasons in

support thereof. See 37 CFR 1.192(c)(7).

(8)   *Claims Appealed*

A substantially correct copy of appealed claim 1 appears on page 1 of the Appendix to the appellant's brief. The minor errors are as follows: in claim 1, line 1, --metal-- should be inserted before "values" and in line 2, --one or more-- should be inserted before "additional".

(9) Prior Art of Record

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

5,232,490	BENDER	8-1993
4,332,777	PAZDEJ	6-1982

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-13 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In claim 1, "to render a metal value insoluble" and "being recovered and render the one or more additional metal values insoluble" are new matter.

Claims 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, "being recovered and one or more additional metal values" is awkward and confusing as to exactly what is being claimed.

Also, "to render a metal value insoluble" is indefinite as to which metal value is referred to, ie. is it one of the metal values.

Also, "to render a metal value insoluble" is indefinite as to what it is rendered insoluble in.

In claim 14, "the digestion mixture" lacks proper antecedent basis in the claim. It is suggested to insert --a digestion mixture comprising-- between "form an" in line 9.

Also, in line 11, it is suggested to insert --a temperature of-- after "attain".

Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bender '490 taken with Pazdej '777.

Bender teaches the process of solubilizing metals from metal containing material by contacting with sulfuric acid containing a reducing agent and a carbon source (see claims 1,29,36 and the examples).

Bender differs in that the sulfuric acid containing hydrofluoric acid is not stated.

Pazdej teaches the use of sulfuric acid and hydrofluoric acid to solubilize metals (see the figures and claims).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use sulfuric acid containing hydrofluoric acid to dissolve metals in the process of Bender because that is what is taught by Pazdej as desirable.

The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to select the portion of the prior art's range which is within the range of applicant's claims because it has been held to be obvious to select a value in a known range by optimization for the best results, see In re Aller, 105 USPQ 233.

The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have selected the overlapping portion of the range disclosed by the reference because overlapping ranges have been held to be a prima facie case of obviousness, In re Malagari, 182 USPQ 549.

(11)   Response to Argument

Appellant states that support for "to render a metal value insoluble" and "being recovered and render the one or more additional metal values insoluble" is found at pg. 2, lines 16-28, pg. 3, lines 13-28 and in the examples of the instant specification.

However in none of these locations is there support for the use of the reducing agent "to render a metal value insoluble" nor for the use of the sulfuric acid solution to "render the one or more additional metal values insoluble" as is now instantly claimed. The phrase "to

render ... metal value(s) insoluble" is taken to mean to precipitate metal values, and nowhere is there support for this in the sections pointed to in the specification above. Instant pg. 3, lines 29-34 supports precipitating UF_4 but that only occurs when fluoride ion and uranium are present in the process, however the instant claims do not require either.

Appellant states that Bender does not utilize a reducing agent and a carbon source.

However the instant claims do not require that the reducing agent and the carbon source be different materials. In other words the reducing agent and the carbon source may be one and the same. Also, claim 36 of Bender teaches the use of a mixture of reductants, ie. reducing agents, which includes carbonaceous materials, ie. a carbon source, and another reducing agent, eg. sulfide materials.

Appellant states that Bender uses the carbon as a reductant whereas the instant process uses the carbon as a catalyst in the reduction of uranium initiated by a separate reductant, such as iron.

However the instant claims are not so limited. The instant claims are not limited to the use of carbon as a catalyst nor to the reduction of uranium by the use of iron.

Appellant states that the disclosure of Pazdej would not suggest the use of a sulfuric acid solution also containing hydrofluoric acid.

However the figures of Pazdej, which are part of the disclosure, clearly show the use of both sulfuric acid and hydrofluoric acid.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

STEVEN BOS
PRIMARY EXAMINER
GROUP 1100